

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2005/000479

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁷: C22C23/02 C22C1/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: C22C1/00-1/06 C22B4/00-4/06 C22C23/00-23/06 C22F1/00 1/06

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

CN-Far, CNKI

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, PAJ, EPODOC, CA, magnesium alloy, aluminum, heat treatment, smelting etc.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CN1401804A; 12. Mar. 2003 (12. 03. 2003); description Page 2	1-3
Y	C:N1210897A; 17. Mar. 1999 (17. 03. 1999); description Page 4	1-3
A	CN1412332A; 23. Apr. 2003 (23. 04. 2003)	1-8
A	JP2004263280A; 24. Sep. 2004 (24. 09. 2004)	1-8
A	US6471797B1 ; 29. Oct. 2002 (29. 10. 2002)	1-8
A	Materials for Mechanical Engineering; Vol. 25, No. 11; Nov. 2001; Liuzili et al; "Survey of the Mg-Al Based Elevated temperature Magnesium Casting Alloys"	1-8

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

" & "document member of the same patent family

Date of the actual completion of the international search 01. Jul. 2005 (01. 07. 2005)	Date of mailing of the international search report 29. DEC 2005 (29. 12. 2005)
Name and mailing address of the ISA/CN The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451	Authorized officer WANG Lin Telephone No. 86-10-62084835

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2005/000479

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

A cast magnesium alloy and the manufacturing method thereof.

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No. PCT/CN2005/000479
--

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN1401804A	12. Mar. 2003 (12. 03. 2003)	None	
CN1210897A	17. Mar. 1999 (17. 03. 1999)	CA2238070C EP0879898A1 AU6711398A JP10324941A US5855697A CA2238070A AU730893B EP0879898B1 DE69801133E JP3354098B2B2	16. Mar. 2004 (16. 03. 2004) 25. Nov. 1998(25. 11.1998) 26. Nov. 1998(26. 11.1998) 08. Dec. 1998(08. 12.1998) 05. Jan. 1999(05.01.1999) 21. Nov. 1998(21. 11.1998) 15. Mar. 2001 (15. 03.2001) 18. JuI. 2001 (18.07.2001) 23. Aug. 2001(23. 08. 2001) 09. Dec. 2002 (09. 12. 2002)
CN1412332A	23. Apr. 2003 (23. 04. 2003)	None	
JP2004263280A	24. Sep. 2004 (24. 09. 2004)	None	
US6471797B1	29. Oct. 2002 (29. 10. 2002)	AU2002248073A1 WO02083964A1 JP2002309332A US2003029526A1 KR2002078936A	28. Oct. 2002 (28. 10. 2002) 24. Oct. 2002 (24. 10. 2002) 23. Oct. 2002 (23. 10. 2002) 13. Feb. 2003 (13. 02. 2003) 19. Oct. 2002 (19. 10. 2002)

国际检索报告

国际申请号

PCT/CN2005/000479

A. 主题的分类

IPC7: C22C23/02 C22C1/02

按照国际专利分类表(IPC)或者同时按照国家分类和IPC 丙种分类

B. 检索领域

检索的最低限度文献(标明分类系统和分类号)

IPC7: C22C1/00-1/06 C22B4/00-4/06 C22C23/00-23 /06 C22F1/00 1/06

包含在检索领域中的除最低限度文献以外的检索文献

CN-PAT, CNKI

在国际检索时查阅的电子数据库(数据库的名称, 和使用的检索词(如使用))

WPI, PAJ, EPODOC, CA, 钴基合金 magnesium alloy, 钢, aluminum, 热处理, heat treatment, 熔炼 smelting 等。

C. 相关文件

类型*	引用文件, 必要时, 指明相关段落	相关的权利要求
Y	CN1401804A; 12. 3 月 2003 (12. 03. 2003); 说明书第 2 页	1-3
Y	CN1210897A; 17. 3 月 1999 (17. 03. 1999); 说明书第 4 页	1-3
A	CN1412332A; 23. 4 月 2003 (23. 04. 2003)	1-8
A	JP2004263280A; 24. 9 月 2004 (24. 09. 2004)	1-8
A	US6471797B1; 29, 10 月 2002 (29. 10. 2002)	1-8
A	帆船工程材料; 第 25 卷第 3 期; 2001 年 11 月; 刺于利等; “镁合金基耐热铸造镁合金的进展”	1-8

D. 其余文件在 C 栏的第 1 页中列出。

 兄同族专利附件。

* 引用文件的具体类型:

"A" 置于不特别相关的表示了现有技术一般状态的文件

"E" 在国际申请日的当月之后公布的专利文献

"L" 可能时优先权要求构成怀疑的文件, 或为确定另一篇引用文件的公布日而引用的或者因其他特殊理由而引用的文件

"O" 涉及公开、使用、展览或其他方式公开的文件

"P" 公布日先于国际申请日但退于所要求的优先权日的文件

"T" 在申请日或优先权日之后公布, 与申请不相抵触, 但为了理解发明之理论或原理的在后文件

"X" 特别相关的文件, 抽取考核文件, 确定要求保护的发明不是新颖的或不具有创造性

"Y" 特别相关的文件, 与另一篇或多篇核对文件结合且非直接结合于本领域技术人员易于理解, 要求保护的发明不具有创造性

"&" 同族专利的文件

国际检索完成的日期

01. 7 月 2005 (01. 07. 2005)

国际检索报告邮寄日期

29·12月 2005 (29·12·2005)

中华人民共和国国家知识产权局 (ISA/C)
中 北京市海淀区知春路 100088

申请人: (86-10)62019451

受权官员

王琳

电话: (86-10)62084835

第II柱 美于某些权利要求不能作为检索主题的意几(接第1页第2项)

按第17(2)(a)项某些权利要求未作国际检索报告的理由如下：

1. D 权利要求：

因为它们涉及到不要求本国际检索单位进行检索的主题，即：

2. D 权利要求：

因为它们涉及到国际申请中不符合规定的要求的部分，以致不能进行任何有意义的国际检索，具体地讲：

3. D 权利要求：

因为它们是优先权权利要求，并且没有按照细则64(a)第2句和第3句的要求撰写。

第III柱 美于缺乏说明性时的意几(接第1页第3项)

本国际检索报告在核国际申请中发现多项发明，即：

铸造镁合金及其制造方法。

i. D 由于申请人按时缴纳了被要求缴纳的全部附加检索费，本国际检索报告将对全部可作检索的权利要求。

2. 因 由于无需付出有理由要求附加的劳功即能对全部可检索的权利要求进行检索，本国际检索单位未通知缴纳任何附加费。

3. 由于申请人按时缴纳了部分被要求缴纳的附加检索费，本国际检索报告将涉及已缴纳的那些权利要求。具体地讲，是权利要求：

4. D 申请人未按时缴纳被要求的附加检索费。因此，本国际检索报告将涉及权利要求中首次提及的发明，包含该发明的权利要求是：

千真万确的说明：D 申请人缴纳了附加检索费，同时提交了异议书，缴纳了异议费。

申请人缴纳了附加检索费，同时提交了异议书，但未缴纳异议费。

D 缴纳附加检索费时未提交异议书。

国际检索报告
关于同族专利的信息

国际申请号
PCT/CN2005/000479

拉索报告中引用的专利文件	公布日期	同族专利	公布日期
CN1401804A	12. 3 月 2003 (12. 03. 2003)	无	
CN1210897A	17. 3 月 1999 (17. 03. 1999)	CA2238070C EP0879898A1 AU6711398A JP10324941A US5855697A CA2238070A AU730893B EP0879898B1 DE69801133E JP3354098B2B2	16. 3 E 2004 (16. 03. 2004) 25. 11 E 1998 (25. 11. 1998) 26. 11 E 1998 (26. 11. 1998) 08. 12 E 1998 (08. 12. 1998) 05. 1 E 1999 (05. 01. 1999) 21. 11 E 1998 (21. 11. 1998) 15. 3 月 2001 (15. 03. 2001) 18. 7 月 2001 (18. 07. 2001) 23. 8 E 2001 (23. 08. 2001) 09. 12 E 2002 (09. 12. 2002)
CN1412332A	23. 4 月 2003 (23. 04. 2003)	55	
JP2004263280A	24. 9 月 2004 (24. 09. 2004)	55	
US6471797B1	29. 10 月 2002 (29. 10. 2002)	AU2002248073A1 WO02083964A1 JP2002309332A US2003029526A1 KR2002078936A	28. 10 E 2002 (28. 10. 2002) 24. 10 E 2002 (24. 10. 2002) 23. 10 月 2002 (23. 10. 2002) 13. 2 E 2003 (13. 02. 2003) 19. 10 E 2002 (19. 10. 2002)